

REMARKS:

Claims 1 and 6 have been amended by this paper. Claims 1, 4-6 and 10-15 remain pending.

Claims 1, 4-6, 10, 11 and 13-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,517,184 to Bruch et al. (the "Bruch reference") in view of U.S. Patent No. 6,476,928 to Barbour et al. (the "Barbour reference"). The rejections are respectfully traversed.

The Bruch reference discloses a method for servicing a printhead having multiple rows of nozzles. (Col. 9, ll. 51-55.) Malfunctioning nozzles on the printhead are identified during a detection operation and the results are stored in a memory device associated with a drop detection unit 530. (Col. 11, ll. 56-58.) The malfunctioning nozzles are serviced with a cleaner unit. (Col. 14, ll. 63-67.)

Thus, the Bruch reference discloses storing malfunctioning nozzle data in a memory device associated with a drop detection unit. However, as conceded by the Examiner (Office action, p. 3), the Bruch reference does not disclose "a printhead memory disposed on or within said housing" of the printhead, let alone storing missing or malfunctioning nozzle data on the printhead (i.e., in a printhead memory).

Referring to Fig. 3, the Barbour reference discloses a printhead assembly 300 having a thermal inkjet head assembly 302, a printhead body 304 and a printhead memory device 306. However, the Barbour reference does not disclose storing nozzle data in the printhead memory device 306.

Accordingly, the Examiner argues that it would have been obvious to modify the printhead and methods disclosed in the Bruch reference to include a printhead memory as disclosed in the Barbour reference. In particular, the Examiner asserts that it "is well known to put memories in different locations within a printer." (Office action, p. 4.)

Applicants respectfully submit that the Examiner's argument misses the point. The issue is not whether it would be obvious to position a printhead memory on the printhead disclosed in the Bruch reference. Rather, the issue is whether, in view of the combination of the Bruch and Barbour references, it would have been obvious to store missing/malfunctioning nozzle data in a printhead memory. Applicants submit that it would not have been obvious.

Specifically, Applicants note that the Bruch reference discloses a method for servicing a printhead wherein certain data pertaining to malfunctioning nozzles is stored in a drop detection unit such that the malfunctioning nozzles can be cleaned with a cleaner unit. Even if the printhead of the Bruch reference was modified to include a memory device, the data pertaining to malfunctioning nozzles would still be stored in the drop detection unit to ensure proper operation. Indeed, modifying the Bruch reference such that the data is stored in a printhead memory, as suggested by the Examiner, would be fatal to the operation disclosed by the Bruch reference.

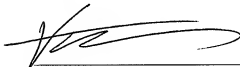
Accordingly, neither the Bruch reference, the Barbour reference, nor the combination of the two suggests storing missing/malfunctioning nozzle data in a printhead memory. If anything, the Bruch reference teaches against storing missing/malfunctioning nozzle data in a printhead memory because, for proper operation, such data is required by other components that act on the printhead.

In view of the foregoing, withdrawal of the rejections of claims 1, 4-6, 10, 11 and 13-15 is respectfully requested.

Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Bruch reference and the Barbour reference and further in view of U.S. Patent No. 6,719,391 to Kojima. For the reasons expressed above, the rejection is respectfully traversed.

Accordingly, it is submitted that the pending claims of the present patent application are in condition for allowance and formal notice thereof is respectfully requested.

Respectfully submitted,



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